

Researches on Stabilization of UAl_3 in Nuclear
Fuels of High Aluminum Content, by H. E. Exner,
G. Petzow, 13 pp.
GERMAN, per, Metall, Vol 23, No 3, 1969, pp 220-225.
AEC/ORNL-Tr-2261-70

Sci/Mater
Mar 70

402,587

The Structure and Mechanical Properties of
Powder Metallurgically Produced Iron-copper
Alloys, by C. Liesner, G. Wassermann.
GERMAN, per, Metall, Vol 23, 1969, pp 414-417.
NLL Ref:9022.401 (746-233)

BISI-7612

Sci-Materials
Feb 70

401,537

The Incorporation of Selenium in Electrodeposited
Thin Fer Alloy Films and Its Influence on Magnetic
Properties, by I. Franz, J. L. Jostan.
GERMAN, per, Metal, Vol 23, 1969, pp 418-424.
NLL Ref:9022.401 (746-276)

Sci-Materials
Feb 70

401,527

Continuous Slitting Process to Determine the
Tangential Residual Stress in Tube and Rings, by
A. Leibner.
GERM, ^{GERM} Metall, No 5, 1969, pp 444-448.
BISI 7596

sci/ materials
nov 69

396,961

Now Areas of Application for Hot-Galvanized Thin
Metal Plate, by F. W. Kohl.
GERMAN, per, Metall, Vol 23, No 8, 1969, pp 791-795.
NTC-71-11935-11F

Nov 71

Lead Sheet in British Building and its Use for
Cladding, by C. H. Knight.
GERMAN, per, Metall, vol. 23, no. 3, 1969, pp. 341-43.
NTC (on loan) 71-11147-13C

August 71

A Realistic Stress Corrosion Test, by P. Brenner,
18 pp.
GUREAN, per, Metall, Vol 23, No 9, 1969, pp 879-886.
AEC/UCRL-Tr-10432-69

Sci/Mater
Apr 70

405,703

Investigation of the Relation Between the Structure
of Zircaloy 2 and its Corrosion Behavior in Steam
at 400 C Under Pressure, by P. Lelong, M. Perez,
17 pp.

GERMAN, per, Metall, No 23, 1969, pp 897-903.
AEC/WAPD-Tr-130-70

Sci/Mater
Sept 70

Discontinuous Grain Growth in Cu-Ag Alloys, by
W. Scharfenberger.
GERMAN, per, Metall, Vol 23, 1969, pp 1126-1134.
*NTIS/NBS TT 71-55298
Available NBS Only

July 71

H.C. (ORNL-tr-2377) BRITTLE-DUCTILE TRANSITION
OF BODY-CENTERED CUBIC METALS WITH SPECIAL CON-
SIDERATION OF TUNGSTEN AND MOLYBDENUM. PART I.
EXPERIMENTAL METHODS. Pink, E.; Sedlatschek, K. 10
Translated for Oak Ridge National Lab., Tenn., from Metall;
23: No. 12, 1249-57 (1969). 20 22p. 24 Dep. NTIS.

28 metallurgy; translations 21 11F

28 MN-25 29 D NSA

Trial Measurements of the Stress Corrosion Cracking
Propagation Rate In Al-Zn-Mg Alloys, by D. Brungs.
GERMAN, per, Metall, Vol 24, No 3, 1970, pp 217-219.
NTC-71-10245-11F

Nov 71

The VAW System Jolt Compressor, by W. Vogeno.
RUMANIAN, per, Metall, vol. 24, 1970, pp. 303-
306.
NTC 71-12864-13I

July 1971

Fatigue Behaviour of Metallic Materials in
Vacuum and Various Atmospheres. Part I, by
M. Boehmer.
GERMAN, per, Metall, Vol 24, No 5, 1970,
pp 446-455.
NTC-71-10748-11F

Nov71

Production and Properties of Dispersion-
Hardened Copper. Part II, by M. Ruhle.
GERMAN, per, Metall, vol. 24, no. 8, 1970,
pp. 852-857.
NTC 71-12826-11F

july 1971

Internal Stresses Occurring During the
Cold-Drawing of Wires and Pipes, by P. J. Kreher.
RUSSIAN, per, Metall, Vol 24, No 10, 1970,
pp 1068-1073.
NTC-71-14818-11F

Feb 72

The Diffusion Coefficient of Zinc in Liquid Copper,
by J. Gerlach.

GERMAN, per, Metall, Vol 24, 1970, pp 1214-1218.

*NTIS/NBS TT 71-53096

Available NBS Only

June 71

K. Ruedinger

The Properties of Titanium and its Application
in Electroplating. ^{to replace}
GERMAN, per, Metall, Vol 24, 1970, pp 1303-1314
NTC 72-13203-11F

sept 72

The Inner Oxidation of AgCd Alloys Under
Oxygen Pressure, by U. Harmsen
EUROPEAN, per, Metall, Vol 25, 1971, pp 133-137
NTC 71-15524-11F

feb 72

Measures-Especially Heat Treatment -
for the Elimination of Stress
Corrosion of Supersaturated Aluminium
Alloys, by P. Brenner.
GERMAN, per, Metall, Vol 25, 1971,
pp 460-469
NTC 72-11818-11F

June 72

Internal Stresses in Electrodeposited Nickel-
Containing SiC and Al₂O₃ Particles and Their
Influence on the Fatigue Strength of Ck 45 Steel
by E. Broszeit,
GERMAN, per. Metall., Vol 25, Oct., 1971,
pp 1110-1114.
BISI 10122

Sep 72

Decomposition Behaviour of a Pure
Al-Mg-Si Alloy Dependent on Structure,
by W. Scharfenberger.
GERMAN, per, Metall, Vol 25, No 10,
1971, pp 1115-1120
NTC 72-12382-11F

objektplatte

July 72

The Propagation Speed of Fatigue
Cracks in Pure Aluminium, by
K. Schwalbe.
GERMAN, per, Metall, Vol 25, 1971,
pp 1130-1135
NTC 72-11976-11F

June 72

Diffusion in Galvanic Layers and on Multilayer
Combinations of Soft Shoulders at Temperatures Between
23 and 212° C., by M. Creydt.
GERMAN, per, Metall., Vol 25, No 10, 1971, pp 1124-1128.
*NTIS TT 72-53055

Aug 72

Scientific Investigations and Technological
Developments, Metal-Vapor Clouds, by
H. Foppl et al.
GERMAN, rpt, Metaldampfwolken 1965 or 1966.
NASA TT F-10,040

U. S. GOVERNMENT USE ONLY

Sci- M/N

Jan 66

302,062

Diffusion in Multiphase Alloy Systems, by Theo
Heumann, 28 pp
GERMAN, per, Metallkunde, Vol 58, 1967, pp 168-
174. P911354367
AEC LA-Tr-67-75

Sci-Materials
Nov 67

344,268

The Structure of Face-Centred Cubic Metals on
Hot Working, by B. Druba.

GERMAN, per, Metall K, Vol 58, No 11, 1967,
pp 799-804.

*BISI 8535

Sci-Mat
Sep 70

Concentration Changes in Binary Metal-Gas Solutions
in the Case of Simultaneous Evaporation of Gas
and Metal, by Gerhard Hoerz, 14 pp.
GERMAN, per, Metallk., Vol 60, 1969, pp 115-120.
AEC/ORNL-Tr-2170-69

Sci/Chem
Dec 69

396,034

Metallography, a State of the Art Review, by
E. Hornbogen and G. Petzow,
german, per. Metallkunde, Vol 61, No 2, 1970,
pp 81-95.
BISI 8878

Jul 71

Effect of Hard Chromium Plating on the
Fatigue Strength of [High and Low] Alloy
Steels and Gray Cast Iron, by H. Weigand,
H. R. Kaiser.

GERMAN, per, Metalloberfläche, Vol 19,
No 1, 1965, pp 1-8.
HB 6476

EE-Germany
Sci/MGH
MAR 66

297,238

The Behavior of Hard Chromium Plated
Steels Under Tensile Loads, by H. Wiegand,
H. R. Kaiser.
GERMAN, per, Metalloberflache, Vol 19,
No 4, 1965, pp 98-104.
HB 6575

Sci-M&M
May 66

300,990

A New Process for Electroless Nickelplating, by
K. Lang.
GERMAN, per, Metalloberflasche, Vol 19, 1965, pp B133-
B138.
NTC-71-12079-11F
HB 6834

Nov 71

Metallographic and X-ray Diffraction Studies of
Hard Chromium Deposits, by H. Wiegand,
H. R. Kaiser.

GERMAN, per, Metalloberflache, Vol 19, No 6,
1965, pp 161-173.

HB 6606

EE-Germany

Sci/N&M

Apr 66

298,875

The Formation of Phosphate Coatings on
Iron and Steel, by CV. Cupr, J. B. Pelikan.
GERMAN, per, Metalloberfläche, Vol 19, No 6,
1965, pp 187-191.
HD 6605

Sci-M&M
May 66

301,012

The Formation of Phosphate Coatings
on Iron and Steel, by V. Cupr, J. B.
Pelikan.

GERMAN, per, Metalloberflaeche, Vol 19,
1965, pp 230-1
TC-1829

331, 555

Sci - Materials
Jul 67

A New Process of Electroless Nickel
Plating, by K. Lang.
GERMAN, per, Metalloberfläche, Vol 19,
No 8, 1965, pp 257-262.
HB 6834

Sci-MEM
Jul 66

304,393

Effect of Contamination by Iron Upon
the Operation of Cyanide Zinc [Plating]
Baths, by F. Hasko.
GERMAN, per, Metalloberflache, Vol 19,
No 8, 1965, pp 263-264.
HB 6893

Sci-M&M
Jul 66

304,391

Notes on the Physical Processes of Mass-
Production Plating, by H. Honig.
GERMAN, per. Metalloberfläche, Vol 20, 1966,
pp 13-18, 175-180; Vol 21, 1967, pp 97-104.
NIL Ref: 9022.4 (67/189)

Sci-Mech
Aug 68

362,036

The Application of Tracer Techniques to
the Study of Electrodeposition, Pt 1, by
E. Raub.

GERMAN, per, Metalloberflache, Vol 20,
1966, pp 62-66.

NLL Ref:9022.4 (68/170)

Sci-Elec
Mar 69

376,999

Contribution to the Anodic Polishing of
Austenitic Steel, by H. Spahn.
GERMAN, per, Metalle Metalle, Vol 20,
No 2, 1966, pp 91-99.
EDISI HFA/TS 821

Sci-MGM
June 66

300,350

The Influence of Machining and Electro-Chemical Treatment on the Behaviour Under Mechanical and Chemical Stressing of an Austenitic Nickel-Chromium Steel. I - Evaluation of Literature and Experimental Details. II - Results of Rotating-Beam Tests, by H. Wiegand, H. Speckhardt.

GERMAN, per, Metalloberflache, Vol 20, Jan 1966, pp 2-10 - I; Apr 1966, pp 165-172 - II.
BISI 4987

314,499
Sci - Mechanical, Industrial
Civil, and Marine Engineering
Dec 66

The Electrodeposition of Bismuth on
Alumina and Steel, by R. Eldenschink,
K. Dommain.
GERMANY, per, Metalloberfläche, Vol 20,
No 4, 1966, pp 173-174.
HB 6919

Sci-M&I
Aug 66

308,808

The Protective Mechanism of Emulsifiable Oils
Against Damage to Materials by Cavitation and
Corrosion, by H. Wiegand, R. Schulmeister.
GERMAN, per, Metalleberfläche, Vol 20, No 6,
1966, pp 265-268.
HB 6933

Sci/Materials
Jan 67

317,937

Suggested Modification of the Hull Cell, by
I. Esih.
EUROPEAN, per, Metalloberflaeche, Vol 20, No 8,
1966, pp 352-355.
NTPC-71-16265-14B
Nasa TTF 10, 831

Jan 72

Plasma Spraying and the Possibility of Producing
Heat-Insulating Protective Coatings on Steel, by
A. Matting and B. Delventhal.
GERMAN, per, Metalloberflache, Vol 20, No 10,
1966, pp 420-434.
HB 7059

Sci/Eat
June 68

358-241

Large-Scale, Industrial Deposition of Protective
Layers on to Steel Strip Using Vacuum Evaporation,
by W. Reichelt.

GERMAN, per, Metalloberfläche, Vol 20, 1966,
pp 474-478.

DISI 5886

Sci/Int
Oct 68

363,345

Notes on the Physical Processes of Mass-
Production Plating, by H. Henig.
GERMAN, per, Metalloberflache, Vol 21, 1967,
pp 97-104.
NLL Ref: 9022.4 (67/189)

Sci-Mech
Aug 68

362,036

Study of the Influence of Zinc on the Electro-
Deposition of Nickel, by A. Knodler
GERMAN, per, Metalloberfläche, Vol 21, 1967,
pp 321-328.
HLL Ref: 9022.4 (67/393)

Sci-Materials
July 68

361,010

The Electrodeposition of Iron-Chromium-Nickel
Alloys from Sulphate Triethanolamino Solutions,
by M. Sarojamma and T. L. Rama Char.
GERMAN, per, Metalloberfläche, Vol 21, No 11,
1967, pp 334-335.
*BIBSI 6167

Sci-Mat
Mar 68

The Present State of Progress in Direct-On One-
Coat Enamelling, by A. Dietzel.
GERMAN, per, Metalloberflache, Vol 21, Dec 1967,
pp 372-373.
*BISI 6230

Sci/Nat
Mar 68

Direct-On Enamelling, by H. Hoffmann.
GERMAN, per, Metalloberflache, Vol 21, Dec 1967,
pp 374-375.
*BISI 6186

Sci/Mat
Nov 68

The Behavior of Selenium in Plating Baths,
by E. Raub.
GERMAN, per, Metalloberfläche, Vol 22, 1968,
pp 1-7.
NLL Ref: 9022.4 (68/284)

Sci-Chem
Oct 69

395,174

The Application of Tracer Techniques to
the Study of Electrodeposition, Pt 2,
by E. Raub.

GERMAN, per, Metalleberflache, Vol 22,
1968, pp 75-79.

NLL Ref: 9022.4 (68/170)

Sci-Elec
mar 69

377,000

The Corrosion-Resistance of Electro-Deposits
of Rhodium on Nickel, by K. E. Becker.
GERMAN, per, Metalloberflache, Vol 22,
1968, pp 145-153.
NLL Ref:9022.4 (68/213)

Sci-Mat
May 69

8
380,792

The Physico-Chemical Principles and the Field
of Application of Electrolytic Heating, by
E. Eichhorn.

GERMAN, per, Metalloberflache, Vol 22, No 7,
1968, pp 213-216. No 8, 1968, pp 240-245.

CEGB

O.A. 706

Sci-Elec
Oct 69

394,603

Plasma-Spraying of Oxide Ceramic Materials:
Properties and Behavior of Plasma-sprayed
Deposits, by F. Eichhorn, J. Metzler.
GERMAN, per, Metalloberfläche, Vol 22, 1968,
pp 225-234.
NLL Ref: 9022.401 (746/10)

Sci-Materials
Nov 69

395,674

Nickel-cadium Deposits in Gas Turbines, by
M. P. Malik.
GERMAN, per, Metalloberfläche, Vol 22, 1968,
pp 235-239.
NLL Ref: 9022.401 (746/26)

Sci-Prop & Fuels
Nov 69

395,673

New Short-Time Corrosion Test for Phosphated or
Chromated, Painted and Galvanized Steel Sheet,
by W. Machu,
GERMAN, per. Metalloberflache, Vol 22, 1968,
pp 274-277.
HB 8035

Sci/Mat
May 70

Viewpoint on the Selection of Heat-
Treatable and Case-hardening Steels,
by K. H. Illgner
GERMAN, per, Metalloberflache, 1968, 22
Nov, pp. 321-330.
RISI 7102

Sci/ nat
Nov 69

396,066

Changes in Properties of Structural Components
by Salt-bath Nitroding (Tenifer Process), by
B. Finnern.

GERMAN, per, Metalloberfläche, Vol 22, 1968,
pp 330-335.

NLL Ref: 9022.401 (746/70)

Sci-Chem
Oct 69

395,185

GERSCHA, A. and WEIDINGER, H. G. Combined salt bath
gas nitriding of austenitic chromium-nickel alloys.
Metalloberfläche 22:336-41 (1968) (NLL-GB 245/LTI-746-71)

NLL-GB 245/LTI-746-71

Stress-Corrosion Cracking Behaviour of Rust and
Acid-Resistant Austenitic Steels in Alkaline-
Earth Metal Halide Solutions, by H. Wiegand.
GERMAN, per, Metalloberflache, Vol 22, Dec. 1968,
pp 353-361.
DISI 7156

sci/ materials

201.080

CIHAL, V. and LEHKA, N. Problem of inter-crystalline
and knife-line corrosion of welds in corrosion-resistant
steels.

Metalloberfläche 22:368-77 (1968) (NLL:GB 245/LTI-
746-85).

NLL Ref: 4022.401 (746/85)

Observations of Electrochemical Processes During
the Corrosion Fatigue of Steel in Acids, by
K. Iwano, K. Komai.

GERMANY, per, Metallgesellschaft, Vol 22, No 12,
1968, pp 378-384.

BISI 7160

ALLIANCE (p. 70-72 707 (276 St.)

sci/ materials
oct 69

394,283

AEC (SCL-T-69-257) STRUCTURE AND PROPERTIES OF
ELECTROLYTICALLY DEPOSITED TIN-LEAD ALLOYS, Hiedel,
W. 16 Translated by B. J. Hazzard for Sandia Labs., Albuquerque,
N. Mex., from 18 Metalloberflaache; 23: No. 2, 42-6(1969). 20 17p.
24 Dep. NTIS.

26 metallurgy; translations 27 11F

28 MN-25 29 P NSA

Surface Protection of Heat-resistant Materials,
by P. Hoch, J. Bren.

GERMAN, per, Metalloberflache, Vol 23, 1969,
pp 13-16.

NLL Ref:9022.401 (746-271)

Sci-Materials
Feb 70

401,534

The Problem of Electrical Safety in Heaters for
Electroplating Baths, by Annon,
GERMAN, per. Metalloberflaeche, Vol 23, No 10, 1969.
BISI 7980

Sci/Mat
Apr 70

406,675

~~Dithionite~~ Antimony and Nickel-Iron-Selenium
Thin Films for Data Storage Electrodeposition,
by A. F. Bogenschutz, J. L. Jostan.
GERMAN, per, Metalloberfläche, Vol 23, 1969,
pp 97-100.
NLL Ref:9022.401 (746-238)

Sci-Materials
Feb 70

401,524

Influence of State of Hard Chromium Deposits
and of Surface Zone of Substrate on Fatigue
Strength of Cast Iron and Steel Components,
BY A. Buch,
GERMAN, per. Metalloberflache, Vol 24, 1970,
pp 124-129.
BISI 8662

Oxygen Reduction in Alkaline Solution at Porous
Nickel Electrodes, by D.M. Drazic, 7 pp.
GERMAN, per. Metalloberflache, Vol 24, 1970,
pp 380-382.
ACSI-K-1890
FSTC-HT-23-1301-72

Apr 72

I. Dubsky

The Cathodic Reactions of Brighteners of the
First Order in Nickel Plating Solutions.
GERMAN, per, Metalloberflaeche, Vol 24, 1970,
pp 423-430
NTC 72-13204-11F

sept 72

High Frequency Sputtering of AlO_2 , by P. Conze
and V. Sattler.

GERMAN, per, Metallberflaeche, Vol 24, No 5,

1970, pp 155-158.

NTC 71-14498-11F

Vol 24

Feb 72

The Behaviour of the Cadmium Electrode
in Alkline Solutions Under Alternating
Anodic and Cathodic Polarisation
Conditions, by El Din Shams.
GERMAN, per, Metalloberflaeche, Vol 25,
1971, pp 7-10
NTC 72-12123-07D

July 72

The Mechanical Properties of Electro-
Deposited Dispersion-Hardened Nickel
Deposits Containing Al_2O_3 and SiC
Particles, by E. Broszeit.

GERMAN, per, Metall, Vol 25, 1971,

PP 470-475

NTC 72-12120-11F

abgeschliffen

July 72

Galvanic Coatings With Dispersed
Particles of Raney Nickel Alloy, by
I. Paseka.

GERMAN, per, Metall, Vol 25, 1971,
pp 640-644

NTC 72-12114-11F

obte K'laec he

July 72

Melting and Horizontal Continuous
Casting Technology for High-Nickel
Alloys, by K. Sczimarowsky.
GERMAN, per, Metall, Vol 25, 1971,
pp 790-797
NTC 72-12486-13H

obef/sec la

July 72

Metal Physics - A Series of Lectures, by
K. Thomas.
GERMAN, bk, Metallphysik, 1967, pp 5-181,
221-542.
*NBS TT 70-57239
Available NBS Only

Sci/Phys
Oct 70

REQ TR CHECK

2-5-21

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EDUCATIONAL METHODS TEXTBOOKS

ANON

UR-METALURGIA 1966-1967, pp 102-145

Process in as

MT 72-24-115L

*Negative
of May 72*

A. LEREMIA

The Phenomenon of Flake-Like Cracks in Soft Steel.
METALLURGIA. 1971, No 8, pp 479-482.

BISI 9837

Mar 73

B.F. Rothenstein

Magnetoelastic Method for Determining the
Microscopic Parameters Characterizing Internal
Stresses in Ferromagnetic Metals

METALLURGIA, No 2, 1972, pp 82-85

BISI 10502

Feb 73

D. Cosma

Aspects of Research Over Recent Years on
Weldable Structural Steels
METALLURGIA, No 4, 1972, pp 1-11
BISI 10719

Feb 73

The Improvement of Brazilian High Iron
Contents Ore Fines, by G. Brandes.
GERMAN, per, Metalurgia A.B.M., Vol 21,
No 90, 1965, pp 355-368.
NTC 72-10106-11F

Apr 72

HyL Process, Manufacture of Steel Start-
ing With Sponge Iron at HyLSA. Use of
Process by USIBA, by C. H. Moniz Braga.
SPANISH, per, Metalurgia ABM. Vol 22,
No 109, 1966, pp 951-959.
NTC 72-11084-11F

May 72